

U. S. Steel Corporation Clairton Works:
21-Inch Mill Engine (Originally called
22", No. 2 Mill)
400 State Street
Clairton
Allegheny County
Pennsylvania

HAER No. PA-49C

HAER
PA,
2-CLAIR,
IC-

PHOTOGRAPHS

HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
Department of the Interior
Washington, D. C. 20240

HISTORIC AMERICAN ENGINEERING RECORD

HAER
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2-CLAIR,
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U. S. STEEL CORPORATION CLAIRTON WORKS:
21-INCH, NO. 2 MILL ENGINE

HAER No. PA-49C

Location: 400 State Street
Clairton, Allegheny County, Pennsylvania

UTM: 17.596010.4461030
Quad: McKeesport, Pennsylvania

Date of Construction: 1910

Builder/Designer: Hooven, Owen, Rentschler
Hamilton, Ohio

Present Owner: U. S. Steel Corporation
Pittsburgh, Pennsylvania

Present Use: Still in use as of 1975

Significance: Drives 21-inch Single train cross-country structural mill.

Specifications:

Type: Hamilton Corliss Horiz Tandem Compound
Bore & Stroke: 42x78x60
Design HP: 5100 RPM: 80 PSI: 80-125
Valves: Corliss Double ported, HP & LP
Const. of Crank: disc 26" dia. shaft
Flywheel Dia. & Face: 20'-0"; 24"; rim section
600"2
Flywheel Type & Construction: Segmental gun iron
Hub 42"; 180,000 lbs.
Governor: Flyball rope driven, 3% reg.
Bearings: 2 @ 28"x52"
Box girder bed plate, 350 ft. 2 bearing surface
on foundation
Weight main bed plate: 150,000 lbs.
Length main bed plate: 24' 8-1/2"
Width main bed plate: 9' 10"
Size sole plate under LP cylinders: 14' 7-3/4"x8'7"
Size sole plate under HP cylinders: 18'3-3/4"x5'4"
Distance: c. shaft to top foundation: 4'0"
Steam pipe: 16" diameter
Globe throttle valve (16") & butterfly valve
HP Exhaust pipe: 18" diameter
Size receiver: 208 ft.3
LP Exhaust pipe: 32" diameter

Prepared for transmittal by: Jean P. Yearby, 1984, from data compiled by
Field Curry, 1975